

### **Amendments to the Claims**

1(Currently amended). A method ~~comprising: of demodulating antenna data containing multiple signals with a dynamically reconfigurable data path in a plurality of protocols, the method comprising the steps of:~~

receiving modulated data by an antenna;

a) configuring a datapath from several predefined configurations to receive the modulated data from the antenna, wherein the configuration selected for the datapath corresponds to a protocol of the received modulated data; and

demodulating the received modulated data in the datapath in accordance with the selected protocol. ~~configuring the datapath for a respective one of the protocols;~~

~~b) demodulating the antenna data containing multiple signals with the datapath; and~~

~~c) repeating steps (a) and (b) for each of the protocols.~~

2. The method of claim 1 ~~further comprising the step of buffering the antenna data prior to step (a)~~ wherein receiving modulated data further includes receiving modulated data to store in a memory.

3. The method of claim 2 ~~wherein the data is for multiple users and step (c) comprises repeating steps (a) and (b) for the antenna data containing multiple signals of the multiple users~~ further including using a controller to select the protocol in accordance with the modulated data stored in the memory.

4-16(Canceled).

17(Currently amended). A system for demodulating signals ~~contained in antenna data in a plurality of protocols for multiple users, the system~~ comprising:

~~an input buffer for receiving the antenna data;~~

~~a dynamically reconfigurable datapath operative to demodulate the signals contained in coupled to the antenna data in the plurality of protocols;~~  
and

~~a controller in electrical communication with the datapath, the controller operative to configure the dynamically reconfigurable datapath to select a protocol and reconfigure the datapath to accept modulated data from the antenna and provide demodulated data in accordance with the protocol. for another protocol after the data of each of the users has been demodulated; and~~  
~~an output buffer for storing the demodulated data.~~

18(Currently amended). The system of claim 17 further including an input buffer to store the data received by the antenna and provide the data to the datapath. wherein the input buffer is operative to repeatedly present the antenna data of the users to the datapath after each reconfiguration by the controller.

19(Currently amended). The system of claim 17 ~~18~~ wherein the dynamically reconfigurable datapath is a communications processor further including an output buffer for storing the demodulated data.

20-21(Canceled).